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PATENT APPLICATION

Attorney Docket No. 15966-518 (Cura-18)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Mehta, et al.
ASSIGNEE : CuraGen Corporation
SERIAL NUMBER : 09/351,617
FILING DATE : July 12, 1999
FOR : GENERAL SCREENING METHOD FOR LIGAND-PROTEIN INTERACTIONS

EXAMINER : Not Yet Assigned
ART UNIT : 1643

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DEC - 9 1999
JCSO 3030
PATENT & TRADEMARK OFFICE

Assistant Commissioner for Patents
Washington, D.C. 20231

TRANSMITTAL LETTER

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Sir:

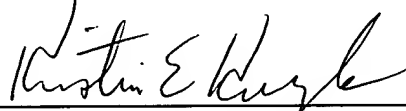
Transmitted herewith for filing in the present application are the following documents: **TECH CENTER 1600/2900**

- ☒ Information Disclosure Statement (3 pages);
- ☒ Modified Form 1449/PTO (2 pages) in duplicate;
- ☒ Copies of Cited references: A1-A4, B1-B6, C1-C24; and
- ☒ Return Postcard

No fee is believed to be due. However, if any fees are to be assessed, the Commissioner is hereby authorized to charge the balance due to the undersigned's account, Deposit Account No. 50-0311, Reference No. 15966-518 (Cura-18). A duplicate copy of this transmittal letter is enclosed.

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at 617/542-6000, Boston, Massachusetts.

Respectfully submitted,



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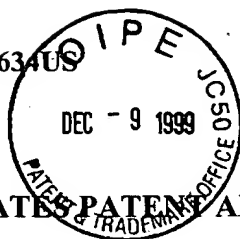
Fax: (617) 542-2241

Express Mail Label No.: EE327623634US

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Assistant Commissioner for Patents
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INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed below and on the attached modified Form PTO-1449 (submitted in duplicate) in the above-identified application, copies of which are submitted herewith. The order of presentation of the references should not be construed as an indication of the importance of the references.

U.S. Patent Documents:

5,468,614	12/21/95	Fields, et al.
5,469,285	12/21/95	Gut
5,871,753	02/16/99	Crabtree, et al.
5,928,868	07/27/99	Liu and Licitra

Foreign Patent Documents:

WO	94/23025	Fowlkes, et al.
WO	95/02684	Crabtree, et al.
WO	95/30012	Broach, et al.
WO	96/06097	Holt, et al.
WO	96/12806	Huang, et al.
WO	97/41255	Liu et al.

APPLICANTS: Metha, *et al.*
U.S.S.N.: 09/351,617

Other Prior Art – Non Patent Literature Documents:

Abramson et al., "Structure/Activity and Molecular Modeling Studies of the Lophotoxin Family of Irreversible Nicotinic Receptor Antagonists." J. Med. Chem. 34: 1798-1804 (1991).
Boopathy et al., "Purification and characterization of sheep platelet cyclo-oxygenase." Biochem. J. 239: 371-377 (1986).
Born et al., "4-(Fluoromethyl)phenyl Phosphate Acts as a Mechanism-based Inhibitor of Calcineurin." Biochem. J. Vol. 270 No. 43: 25651-25655 (1995).
Durfee et al., "The retinoblastoma protein associates with the protein phosphatase type 1 catalytic subunit." Genes & Develop. 7: 555-569 (1993).
Edwards et al., "Peptidyl α -Ketoheterocyclic Inhibitors of Human Neutrophil Elastase. 2. Effect of Varying the Heterocyclic Ring on *in Vitro* Potency." J. Med. Chem 38: 76-85 (1995).
Griffin et al., "Specific Covalent Labeling of Recombinant Protein Molecules Inside Live Cells." Science 281: 269-272 (1998).
Hanzlik et al., "Reversible covalent binding of peptide nitriles to papain." Biochimica et Biophysica Acta 1035: 62-70 (1990).
Li et al., "7-Substituted, 1,4,6-androstatriene-3, 17-diones as enzyme-activated irreversible inhibitors of aromatase." L. steroid Biochem. 36: 533-539 (1990).
Licitra and Liu, "A three-hybrid system for detecting small ligand-protein receptor interactions." Proc. Natl. Acad. Sci. 93: 12817-12821 (1996).
Mendelsohn and Brent, "Applications of interaction traps/two-hybrid systems to biotechnology research." Current Opinion in Biochemistry 5: 482-486 (1994).
Michels et al., "Combinatorial diocatalysis: a natural approach to drug discovery." TIBTECH 16: 210-215 (1998).
Mueller et al., "Leukotriene A₄ hydrolase: Mapping of a hemicosapeptide involved in mechanism-based inactivation." Proc. Natl. Acad. Sci. 92: 8383-8387 (1995).
O'Brien et al., "Inhibition of monoamine oxidase by clorgyline analogues." J. Neural Transm. [Suppl]41: 295-305 (1994).
Pruschy et al., "Mechanistic studies of a signaling pathway activated by the organic dimerizer FK1012." Chemistry and Biology 1: 163-172 (1994).
Roth and Siok, "Acetylation of the NH₂-terminal Serine of Prostaglandin Synthetase by Aspirin." The Journal of Biological Chemistry Vol 253 No. 11: 3782-3784 (1978).
Salto et al., "In Vitro Characterization of Nonpeptide Irreversible Inhibitors of NIV Protease." The Journal of Biological Chemistry Vol. 269 No. 14: 10691-10698 (1994).
Schenkein and Pratt, "Phenylpropynal, a specific, irreversible, non- β -lactam inhibitor of β -Lactamases." The Journal of Biological Chemistry Vol. 255, No. 1: 45-48 (1980).
Silverman, "[10] Mechanism-Based Enzyme Inactivators." Methods in Enzymology 249: 240-283 (1995).
Singh et al., "Structure-based Design of a Potent, Selective, and Irreversible Inhibitor of the Catalytic Domain of the erbB Receptor Subfamily of Protein Tyrosine Kinases." J. Med. Chem. 40: 1130-1135 (1997).
Snider and Brueggermeier, "Covalent modification of aromatase by a radiolabeled irreversible inhibitor." L. steroid Biochem. Vol. 22 No. 3: 325-330 (1985).
Tous et al., "O'-(Epoxyalkyl) tyrosines and (Epoxyalkyl) Phenylalanine as Irreversible Inactivators of Serine Proteases: Synthesis and Inhibition Mechanism." J. Med. Chem 33: 1620-1634 (1990).
Yang et al., "Protein-peptide interactions analyzed with the yeast two-hybrid system." Nucleic Acids Research Vol. 23 No. 7: 1152-1156 (1995).
Zaugg et al., "Modification of Hemoglobin with Analogs of Aspirin." The Journal of Biological Chemistry Vol. 255 No. 7: 2816-2821 (1980).
Zhang et al., "Rationally Designed Inhibitors of Inosine Monophosphate Dehydrogenase." J. Med. Chem. 40: 4-8 (1997).

This Information Disclosure Statement is being been filed:

- ☐ within three months of the filing date of the National Application;
- ☐ within three months of the filing date of the entry of the National Stage, as set forth in 37 C.F.R. §1.491, in an International Application; or
- ☒ before the mailing date of a first Office Action on the merits in the above-identified case.

Accordingly, no fee or certification is required. 37 C.F.R. §1.97

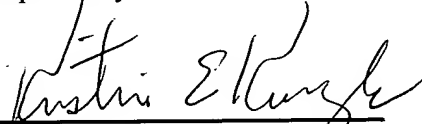
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A copy of each of the above-identified information is enclosed unless otherwise indicated on the attached Form PTO-1449 (modified). It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and signs the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested. Please charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 15966-518 (CURA-18)

Respectfully submitted,



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